California Wildlife Habitat Relationships System California Department of Fish and Wildlife California Interagency Wildlife Task Group

TERRESTRIAL GARTERSNAKE Thamnophis elegans

Family: NATRICIDAE Order: SQUAMATA Class: REPTILIA

R062

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DISTRIBUTION, ABUNDANCE, AND SEASONALITY

This often-abundant gartersnake is found in the Coast Ranges from the Oregon border south to southern Santa Barbara Co., throughout northern California including the northern Sacramento Valley, and the Sierra Nevada south to Kern Co. Also found in the San Bernardino Mts. of southern California and on Santa Rosa Island. Associated with permanent or semi-permanent bodies of water in a variety of habitats. Elevation sea level to 3660 m (12,000 ft).

SPECIFIC HABITAT REQUIREMENTS

Feeding: Over much of its range this species feeds on terrestrial prey to a larger degree than the other gartersnakes with which it occurs. Small mammals, birds, fishes, frogs, (especially during the metamorphic peak), salamanders, insects, crabs, marine polychaete worms, leeches, earthworms, gastropods (snails and slugs), and even regurgitated gull foods and camper refuse have been listed among the food items taken (Fitch 1941, White and Kolb 1974, Wassersug and Arnold 1976).

Cover: Prefers holes, especially small mammal burrows, crevices, and surface objects. Often basks in the open near cover. In cold areas gartersnakes often spend the period of winter inactivity aggregated, sometimes with other species, in fissures, in rocky accumulations, in mammal burrows, or other suitable hibernacula. In milder areas mammal burrows and surface objects such as flat rocks and rotting logs serve as winter refuges.

Reproduction: Courtship and mating normally occur soon after spring emergence. Young are born alive, usually in secluded sites such as under the loose bark of rotting logs or in dense vegetation near pond or stream margins.

Water: No information on water requirements. This species is normally found in the vicinity of permanent or semi-permanent sources of water. Individuals occasionally encountered relatively far from water.

Pattern: Associated with permanent or semi-permanent bodies of water in a variety of habitats.

SPECIES LIFE HISTORY

Activity Patterns: An active diurnal snake. During the warm days of summer most activity occurs during morning and late afternoon. During cooler weather of spring and fall and at higher elevations snakes restrict their activity to the warm afternoons. On warm days during winter, gartersnakes have been observed to emerge and bask in the sun at the entrances of hibernacula.

Seasonal Movements/Migration: In cold northern climates red-sided gartersnakes (T. s. parietalis) are known to make migrations to and from hibernacula where up to 10,000 individuals remain aggregated throughout the fall, winter and early spring (Aleksuik 1977). It is probable that terrestrial gartersnakes in California make similar migrations at inland montane localities. Elsewhere in the state migration is not expected.

Home Range: The nature of the home range of gartersnakes in California is not well known. There is likely considerable overlap in the home ranges of neighboring individuals, as snakes can be located every few meters along suitable shorelines.

Territory: Not thought to be territorial. Although this species is not well studied, other gartersnakes have not been observed exhibiting behaviors suggesting territoriality.

Reproduction: Courtship occurs in spring soon after emergence. Seven to 30 young are born in July and August.

Niche: Terrestrial gartersnakes are taken as prey by mammals, birds, and other snakes despite the release of a repulsive musk from the postanal glands of disturbed individuals. Their competitive relationships with other snakes (especially other gartersnakes) are not well understood.

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